WHAT IS CLAIMED IS:

1. A solid-state imaging device, comprising at least one unit pixel portion,

wherein each of the at least one unit pixel portion comprises:

a light receiving portion for subjecting incident light to photoelectric conversion to output electric charges; and

an optical signal detecting portion comprising a first conductivity type buried region for accumulating the output electric charges,

wherein the light receiving portion comprises:

at least a portion of a second conductivity type impurity diffusion region; and

at least a portion of a first conductivity type well region provided between a second conductivity type well region and the second conductivity type impurity diffusion region, and

wherein the second conductivity type well region and the second conductivity type impurity diffusion region are separated from each other.

2. A solid-state imaging device according to claim 1,

wherein the light receiving portion is a light receiving diode, and the optical signal detecting portion is a transistor.

3. A solid-state imaging device according to claim 2,

wherein the optical signal detecting portion comprises a second conductivity type drain diffusion region integrated with the second conductivity type impurity diffusion region, a second conductivity type source diffusion region, a gate electrode, and a channel region,

the first conductivity type buried region is provided within the first conductivity type well region, and the first conductivity type buried region is provided closer to the second conductivity type source diffusion region than to the second conductivity type drain diffusion region, and

an impurity concentration of the first conductivity type buried region is higher than an impurity concentration of the first conductivity type well region.

4. A solid-state imaging device according to claim 1, further comprising a terminal portion for applying a predetermined potential to the second conductivity type

well region.

5. A solid-state imaging device according to claim 4,

wherein the solid-state imaging device comprises a plurality of the unit pixel portions arranged in a predetermined direction, and

the terminal portion is shared by the plurality of the unit pixel portions arranged in the predetermined direction.

6. A solid-state imaging device according to claim 1,

wherein the second conductivity type impurity diffusion region and the second conductivity type well region are separated from each other via the first conductivity type well region, and

a channel region is provided at a position in the first conductivity type well region, the position being located between the second conductivity type impurity diffusion region and the second conductivity type well region.

7. A solid-state imaging device according to claim 6, further comprising a gate terminal for applying a predetermined potential to the channel region.

8. A solid-state imaging device according to claim 7, wherein a conduction between the second conductivity type well region and the second conductivity type impurity diffusion region varies depending on a change in a potential of the gate terminal.

9. A solid-state imaging device according to claim 3,

wherein at least a portion of the second conductivity type well region is provided between a first conductivity type semiconductor substrate and the first conductivity type well region, and

an impurity concentration of each of the second conductivity type well region and the first conductivity type buried region is such that when substantially the same potential is applied to the second conductivity type drain diffusion region, the gate electrode, and the second conductivity type well region, electric charges accumulated in the first conductivity type buried region are transferred to the first conductivity type semiconductor substrate.

10. A method for driving a solid-state imaging device,

wherein the solid-state imaging device comprises

at least one unit pixel portion,

each of the at least one unit pixel portion comprises:

a light receiving portion for subjecting incident light to photoelectric conversion to output electric charges; and

an optical signal detecting portion comprising a first conductivity type buried region for accumulating the output electric charges,

the light receiving portion comprises:

at least a portion of a second conductivity type impurity diffusion region; and

at least a portion of a first conductivity type well region provided between a second conductivity type well region and the second conductivity type impurity diffusion region, and

the second conductivity type well region and the second conductivity type impurity diffusion region are separated from each other,

wherein at least a portion of the second conductivity type well region is provided between a first conductivity type semiconductor substrate and the first conductivity type well region, and

wherein the method comprises the step of:

applying a potential, which is lower than a potential applied to the second conductivity type impurity diffusion region, to the second conductivity type well region during a period, in which electric charges accumulated in the first conductivity type buried region are discharged to the first conductivity type semiconductor substrate.

11. A method according to claim 10,

wherein the second conductivity type impurity diffusion region and the second conductivity type well region are separated from each other via the first conductivity type well region, and

a channel region is provided at a position in the first conductivity type well region, the position being located between the second conductivity type impurity diffusion region and the second conductivity type well region,

wherein the method further comprises the step of:

applying a predetermined potential to the channel region during the discharging period to electrically cut off the second conductivity type impurity diffusion region from the second conductivity type well region.

12. A method for driving a solid-state imaging device,

wherein the solid-state imaging device comprises at least one unit pixel portion,

each of the at least one unit pixel portion comprises:

a light receiving portion for subjecting incident light to photoelectric conversion to output electric charges; and

an optical signal detecting portion comprising a first conductivity type buried region for accumulating the output electric charges,

the light receiving portion comprises:

at least a portion of a second conductivity type impurity diffusion region; and

at least a portion of a first conductivity type well region provided between a second conductivity type well region and the second conductivity type impurity diffusion region, and

the second conductivity type well region and the second conductivity type impurity diffusion region are separated from each other, and

wherein the method comprising the step of:

applying a potential, which is higher than

a potential applied to the second conductivity type impurity diffusion region, to the second conductivity type well region during a period, in which the amount of electric charges accumulated in the first conductivity type buried region are read out.

13. A method according to claim 12,

wherein the second conductivity type impurity diffusion region and the second conductivity type well region are separated from each other via the first conductivity type well region, and

a channel region is provided at a position in the first conductivity type well region, the position being located between the second conductivity type impurity diffusion region and the second conductivity type well region, and

wherein the method further comprises the step of:

applying a predetermined potential to the channel region during the reading period to electrically cut off the second conductivity type impurity diffusion region from the second conductivity type well region.

14. A method according to claim 12,

wherein the optical signal detecting portion

comprises a second conductivity type drain diffusion region integrated with the second conductivity type impurity diffusion region, a second conductivity type source diffusion region, a gate electrode, and a channel region, and

wherein the method further comprises the step of:

applying a potential, which is lower than a potential applied to the second conductivity type impurity diffusion region, to the gate electrode during the reading period.